



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,855	03/17/2004	Cheol Jin Kim	1594.1355	1971

21171 7590 06/14/2005

STAAS & HALSEY LLP  
SUITE 700  
1201 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER

WALBERG, TERESA J

ART UNIT PAPER NUMBER

3753

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/801,855	<b>Applicant(s)</b> KIM, CHEOL JIN	
	<b>Examiner</b> Teresa J. Walberg	<b>Art Unit</b> 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-21 and 23-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-21 and 23-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

### DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-20, 23, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Filipowski (4,884,626) in view of Dean (2,696,775) and Bradshaw (2,696,775).

Filipowski discloses a food chamber and method of use including holding the food at a predetermined cold storage temperature for a predetermined time, then performing a cooking mode by heating the food in the same chamber.

With respect to claim 3 and 12, a thawing mode is taught at col. 5, line 55.

With respect to claim 5, microwave heating is taught at col. 4, line 39.

With respect to claim 6 and 11, the cold storage mode is re-activated if food is determined to be present in the cooking cavity after a predetermined period has elapsed after the cooking mode. See col. 8, lines 41-68.

With respect to claim 14, a warming mode is taught at col. 8, lines 41-49.

Filipowski does not disclose that the cooling of the food is performed by vacuum or that the vacuum level is adjusted to control the temperature during cold storage mode.

Dean teaches applying a vacuum to cool food in a cooking chamber and teaches that vacuum cooling cools more rapidly than other forms of refrigeration and thus prevents spoilage.

It would have been obvious in view of Dean to use vacuum cooling of the food in the heating and cooling chamber of Filipowski, the motivation being to cool the food more rapidly and thus prevent spoilage.

Bradshaw teaches controlling a cooling temperature by adjusting the vacuum level. See col. 2, lines 58-65.

It would have been obvious in view of Bradshaw to control the cooling temperature by adjusting the vacuum level in the heating and cooling chamber of Filipowski in view of Dean, the motivation being to maintain the food at a suitable temperature and prevent damage to the food.

While it is noted that the sensor for determining if food is present used by Filipowski functions by detecting whether the door has been opened, it is specifically used by Filipowski as a sensor to determine whether food is present and thus meets the terms of the claims. If applicant wished to limit the claims to a sensor that senses food, it is recommended that claims either be amended to specifically recite a "food sensor" or else be amended to use means or step plus function language to invoke 35 USC 112, 6<sup>th</sup> paragraph.

3. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Filipowski (4,884,626) in view of Dean (2,696,775) and Bradshaw (2,696,775) as

applied to claims 1, 3-20, 23, and 26 above and further in view of Fukada et al (3,470,942).

Filipowski in view of Dean and Bradshaw disclose the claimed structure and method with the exception of the thawing mode including applying microwave heating while cooling the food.

Fukada et al teaches thawing food by applying microwaves while cooling. See abstract. Fukada et al further teaches that thawing by microwaves without cooling causes surface damage to the food (col. 1, lines 36-47).

It would have been obvious in view of Fukada et al to thawing food by applying microwaves while cooling the food in the heating and cooling chamber of Filipowski in view of Dean and Bradshaw, the motivation being to prevent damage to the food by overheating the surface of the food.

4. Claims 21 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Filipowski (4,884,626) in view of Dean (2,696,775) and Bradshaw (2,696,775) as applied to claims 1, 3-20, 23, and 26 above and further in view of Eichelberger et al (4,430,557).

Filipowski in view of Dean and Bradshaw disclose the claimed structure and method with the exception of a moisture supply container.

Eichelberger et al teach providing a moisture supply container (252) inside a cooking chamber to enable steaming of food. See col. 9, lines 50-69.

It would have been obvious in view of Eichelberger et al to provide a moisture supply container for the heating and cooling chamber of Filipowski in view of Dean and Bradshaw, the motivation being to enable steaming of the food during the cooking cycle.

5. Applicant's arguments filed 03 May 2005 have been fully considered but they are not persuasive.

The applicant argues that the Bradshaw patent relates to industrial preparation of farinaceous foodstuff and is thus non-analogous art. However, the "farinaceous foodstuff" is disclosed by Bradshaw as being breads and pie crust. Since breads and pie crusts are commonly baked in household ovens, an apparatus for baking such items is considered to be analogous art to a household oven.

The applicant argues that Filipowski does not disclose the use of a food sensor for determining if food is in the chamber. While it is noted that the sensor for determining if food is present that is used by Filipowski functions by detecting whether the door has been opened, it is specifically used by Filipowski as a sensor to determine whether food is present and thus meets the terms of the claims. If applicant wished to limit the claims to a sensor that senses food, it is recommended that claims either be amended to specifically recite a "food sensor" or else be amended to use means or step plus function language to invoke 35 USC 112, 6<sup>th</sup> paragraph.

Art Unit: 3753

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ovadia is cited to show a heating chamber with vacuum and microwaves.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teresa J. Walberg whose telephone number is 571-272-4790. The examiner can normally be reached on M-F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on 571-272-4930. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Teresa J. Walberg  
Primary Examiner  
Art Unit 3753

tjw